

WHAT IS CLAIMED IS:

1. A green light-emitting phosphor for a display, comprising a manganese-activated zinc silicate phosphor and 5 being excited by an electron beam whose acceleration voltage is 15 kV or less to emit green light,

wherein the manganese-activated zinc silicate phosphor is composed of particles having an average particle size of 1.0 to 2.0  $\mu\text{m}$ .

10 2. The green light-emitting phosphor for a display as set forth in claim 1, wherein a 50%D value of a particle size distribution that a weight-integrated distribution of a particle size of the manganese-activated zinc silicate phosphor is 50%, is 2.0 to 3.0  $\mu\text{m}$ .

15 3. The green light-emitting phosphor for a display as set forth in claim 2, wherein a ratio of the 50%D value of the particle size distribution to the average particle size of the manganese-activated zinc silicate phosphor is 1.0 to 2.0.

20 4. The green light-emitting phosphor for a display as set forth in any one of claims 1 through 3, wherein the manganese-activated zinc silicate phosphor has an afterglow time of 8 ms or less.

25 5. A field-emission display, comprising:  
a phosphor layer including a blue light-emitting phosphor layer, a green light-emitting phosphor layer and a red light-emitting phosphor layer;

an electron emitting source which emits an electron beam having an acceleration voltage of 15 kV or less onto the phosphor

layer to make it to emit light; and

an envelope which vacuum-seals the electron emitting source and the phosphor layer,

wherein the green light-emitting phosphor layer includes  
5 the green light-emitting phosphor for a display as set forth in any one of claims 1 to 4.

6. The field-emission display as set forth in claim 5, wherein the green light-emitting phosphor layer has a thickness of 1 to 10  $\mu\text{m}$ .